IN THE CLAIMS

Please amend the claims as follows. Presented below is a complete listing of claims in the revised format showing markings as set forth by the U.S. Patent and Trademark Office on January 31, 2003:

1. (Currently Amended) In a digital imaging system, a method for distributed digital image processing, the method comprising:

recording luminosity information at a first device, for representing an image that has been digitally captured at the first device;

without performing color interpolation at the first device, generating compressed luminosity information at the first device by applying a wavelet transform compression to individual bit planes that comprise the luminosity information, followed by applying quantization and compression to the luminosity information;

packaging said compressed luminosity information with header information identifying the individual bit[[-]] plane[[s]];

transmitting said compressed luminosity information to a second device in a wireless manner using a packet-based communication protocol;

restoring said luminosity information from said compressed luminosity information at the second device; and

converting said luminosity information at the second device into a color image, including performing color interpolation at the second device.

2. (Canceled)

3. (Original) The method of claim 1, wherein said luminosity information comprises light-level information for representing an image that has been digitally captured at the first device.

4. (Original) The method of claim 1, wherein said generating step includes:

applying generic binary compression to said compressed luminosity information

at the first device.

5. (Original) The method of claim 4, wherein said step of applying generic binary compression includes applying run-length encoding.

6. (Original) The method of claim 4, wherein said step of applying generic binary compression includes applying Huffman coding.

7. (Original) The method of claim 1, wherein said restoring step includes:
reversing said compression that occurred at the first device.

8 - 9. (Canceled)

10. (Original) The method of claim 1, wherein said step of converting said luminosity information into a color image includes:
interpolating color information for the image from said luminosity information.

11. (Original) The method of claim 10, wherein said interpolating step includes:
apply a YUV transformation to said luminosity information at the second device for converting said luminosity information into a color image in YUV color space.

12. (Original) The method of claim 10, wherein said step of converting said luminosity information into a color image further includes:
converting the color image into a standard file format at the second device.

13. (Original) The method of claim 12, wherein said standard file format comprises a JPEG file format.

14. (Original) The method of claim 12, wherein said step of converting said luminosity information into a color image further includes:
applying JPEG compression to the color image at the second device.

15. (Original) The method of claim 1, wherein said step of transmitting said compressed luminosity information to a second device includes:

transmitting said compressed luminosity information from a digital camera to a computer using a packet-based communication protocol.

16. (Original) The method of claim 15, wherein said step of transmitting said compressed luminosity information from a digital camera to a computer using packet-based communication protocol includes:

selectively connecting the digital camera to a cellular phone for establishing a wireless communication session with the computer.

17. (Original) The method of claim 1, wherein said second device comprises a computer with connectivity to the Internet and wherein said method further includes making the color image available to multiple users.

18. (Original) The method of claim 1, wherein said transmitting step includes:

transmitting said compressed luminosity information by first transmitting a lower-quality representation of the image captured at the first device.

19. (Original) The method of claim 18, wherein said lower-quality representation of the image is converted into a higher-quality representation at a later point in time.

20. (Original) The method of claim 18, wherein said lower-quality representation of the image is converted into a higher-quality representation by synchronizing said lower-quality representation with said higher-quality representation.

21. (Currently Amended) In a digital imaging system, a method for deferring digital image processing, the method comprising:

recording sensor information from an image sensor at a first device, for representing an image that has been recorded at the image sensor of the first device;

compressing said sensor information prior to color processing by applying a transformation compression to individual bit planes that comprise the sensor

information, for generating compressed sensor information at the first device;

packaging said compressed sensor information with header information identifying the individual bit[[-]]plane[[s]];

without having performed color processing at the first device, transmitting said compressed sensor information to a second device in a wireless manner using a packet-based communication protocol; and

decompressing said compressed sensor information at the second device, whereupon said sensor information may thereafter be processed into a color image.

22. (Canceled)

23. (Original) The method of claim 21, wherein said sensor information comprises light-level information for representing an image that has been digitally recorded at the first device.

24. (Previously Presented) The method of claim 21, wherein said compression step includes:

applying a wavelet transform to individual bit planes that comprise the sensor image; and

applying compression to the transformed sensor image, to create said compressed sensor information at the first device.

25. (Original) The method of claim 24, wherein said step of applying compression to the transformed sensor image includes:

applying compression using run-length encoding.

26. (Original) The method of claim 24, wherein said step of applying compression to the transformed sensor image includes:

applying compression using Huffman coding.

27. (Original) The method of claim 24, wherein said decompression step includes:

reversing said wavelet transform that occurred at the first device.

28 - 29. (Canceled)

30. (Original) The method of claim 21, further comprising:

converting said sensor information into a color image by interpolating color information for the image from said sensor information.

31. (Original) The method of claim 30, wherein said converting step includes:

apply a YUV transformation to said sensor information at the second device for converting said sensor information into a color image in YUV color space.

32. (Original) The method of claim 30, wherein said converting step includes:

converting the color image into a standard file format at the second device.

33. (Original) The method of claim 32, wherein said standard file format comprises a JPEG file format.

34. (Original) The method of claim 32, wherein said converting step includes:

applying JPEG compression to the color image at the second device.

35. (Original) The method of claim 21, wherein said step of transmitting said compressed sensor information to a second device includes:

transmitting said compressed sensor information from a digital camera to a computer in a wireless manner using a communication protocol.

36. (Original) The method of claim 35, wherein said step of transmitting said compressed sensor information from a digital camera to a computer includes:

selectively connecting the digital camera to a cellular phone for establishing a wireless communication session with the computer.

37. (Original) The method of claim 21, wherein said second device comprises a

computer with connectivity to the Internet and wherein said method further includes making the color image available to multiple users.

38. (Original) The method of claim 21, wherein said transmitting step includes:

transmitting said compressed sensor information by first transmitting a lower-quality representation of the image recorded at the first device.

39. (Original) The method of claim 38, wherein said lower-quality representation of the image is converted into a higher-quality representation at a later point in time.

40. (Original) The method of claim 38, wherein said lower-quality representation of the image is converted into a higher-quality representation by synchronizing said lower-quality representation with said higher-quality representation.

41. (Previously Presented) An imaging system providing deferred image processing, the system comprising:

an imager having a sensor for recording luminosity information for a visual image captured by the imager, said luminosity information comprising luminosity values recorded by the sensor;

a compressor module for compressing said luminosity information by applying a transformation compression to individual bit planes that comprise the luminosity information, for generating compressed luminosity information at the imager without having performed color processing;

a wireless communication link for transmitting said compressed luminosity information to a target device in a wireless manner using a packet-based communication protocol; and

a decompression module for decompressing said compressed luminosity information at the target device, whereupon said sensor information may thereafter be processed into a color image.

42. (Canceled)

43. (Original) The system of claim 41, wherein said luminosity information comprises brightness information for representing an image that has been digitally captured at the imager.

44. (Original) The system of claim 41, wherein said compression module includes:

a generic binary compression module for compressing said luminosity information at the first device.

45. (Original) The system of claim 44, wherein said generic binary compression module applies run-length encoding.

46. (Original) The system of claim 44, wherein said generic binary compression module applies Huffman coding.

47. (Original) The system of claim 44, further comprising a generic binary decompression module for reversing generic binary compression that has been applied at the imager.

48 - 49. (Canceled)

50. (Original) The system of claim 41, wherein said target device includes:

an interpolation module for interpolating color information for the image from said luminosity information.

51. (Original) The system of claim 50, wherein said interpolation module applies a YUV transformation to said luminosity information at the target device for converting said luminosity information into a color image in YUV color space.

52. (Original) The system of claim 41, wherein said target device further includes:

a compression module for converting the color image into a standard

compressed file format at the target device.

53. (Original) The system of claim 52, wherein said standard compressed file format comprises a JPEG file format.

54. (Original) The system of claim 52, wherein said compression module of said target device includes a JPEG module for applying JPEG compression to the color image at the target device.

55. (Original) The system of claim 41, wherein said imager comprises a digital camera, wherein said target device comprises a computer, and wherein said communication link is coupled to a cellular phone device for transmitting said compressed luminosity information from said digital camera to said computer in a wireless manner using a communication protocol.

56. (Original) The system of claim 55, wherein said communication link is selectively coupled to the cellular phone for establishing a wireless communication session between the digital camera and the computer.

57. (Original) The system of claim 41, wherein said target device comprises a computer with connectivity to the Internet, which provides access to the color image to multiple users.

58. (Original) The system of claim 51, wherein said communication link transmits said compressed luminosity information by first transmitting a lower-quality representation of the image captured at the imager.

59. (Original) The system of claim 58, wherein said lower-quality representation of the image is converted into a higher-quality representation at a later point in time.

60. (Original) The system of claim 58, wherein said lower-quality representation of the image is converted into a higher-quality representation by synchronizing said

lower-quality representation with said higher-quality representation.

61. (Original) The system of claim 41, wherein said imager comprises a selected one of a digital camera, a digital camcorder, and a closed circuit surveillance camera.

62. (Original) The system of claim 41, wherein said target device comprises a desktop computer.

63. (Original) The system of claim 41, wherein said target device comprises a server computer.

64. (Original) The system of claim 41, wherein said sensor comprises a complementary metal-oxide semiconductor (CMOS) image sensor.

65. (Original) The system of claim 41, wherein said sensor comprises a charge-coupled device (CCD) image sensor.

66. (Original) The system of claim 41, wherein said luminosity information comprises gray-scale luminosity information, prior to being processed into a color image.

67. (Previously Presented) The system of claim 41, wherein said compressor module comprises a wavelet transform engine for applying a wavelet transform to each individual bit plane that comprises the luminosity information.

68. (Original) The system of claim 41, wherein said compressed luminosity information comprises a wavelet transformed and compressed luminosity record of the image recorded at the sensor.